

required payments in connection with these bonds.

(c) *Ruling.* Following the principles and definitions set forth in paragraphs (d) and (e) of § 1.3, it is our conclusion that the \$12,000,000 City of Atlanta and Fulton County Recreation Authority (Georgia), Revenue Bonds, Series 1964, are eligible for purchase, dealing in, underwriting and unlimited holding by National Banks.

Dated: June 30, 1964.

[SEAL] JAMES J. SAXON,
Comptroller of the Currency.

[P.R. Doc. 64-5715; Filed, July 6, 1964;
8:40 a.m.]

Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Agency

SUBCHAPTER B—AIRSPACE (NEW)

[Airspace Docket No. 63-WA-74]

PART 71—DESIGNATION OF FEDERAL AIRWAYS, CONTROLLED AIRSPACE, AND REPORTING POINTS (NEW)

PART 75—ESTABLISHMENT OF JET ROUTES (NEW)

Revision of Airway and Route Structure

On March 28, 1964, a notice of proposed rule making was published in the *FEDERAL REGISTER* (29 F.R. 4161) stating that the Federal Aviation Agency was considering amendments to Part 71 (New) and Part 75 (New) of the Federal Aviation Regulations which would accomplish the following:

1. After the lateral and vertical extent of all Federal airways except those for Alaska and Hawaii, where the existing vertical extent would be retained.

2. After the vertical extent of jet routes.

3. Revoke the intermediate altitude VOR Federal airways and associated positive control route segments.

4. Revoke intermediate altitude reporting points.

Interested persons were afforded an opportunity to participate in the rule making through submission of comments. The following comments were received:

1. The Department of the Navy concurred with the proposals subject to later consideration of the actual descriptions of airspace assignments and considers the proposals consistent with the Navy and Marine requirements for use of the national airspace. It urges early adoption of the nautical mile as the unit of measure for all airspace assignments. In addition, for operation above FL 450, it urges that consideration be given to the possibility of permitting direct flight operations by TACAN degree/distance for route determination, for permitting pilots to file reporting points at distances no greater than 200 miles or the distance equivalent to 30 minutes of filed true airspeed, whichever better serves the pilot, and flight following service afforded

the pilot, where available, to assist with on-course navigation.

Degree/distance operations are authorized for certain naval tactical flights in accordance with Agency Order AT P 7110.1A, Part 700, section 700. The Agency plans to coordinate with the Navy to develop means to accommodate other flight requirements for degree/distance operations. Radar monitoring service is now available at the request of the pilot and is dependent upon availability of equipment, adequate communications, and controller workload.

2. The Air Transport Association of America endorsed the proposed revisions to Part 71 and endorsed the proposed revisions to Part 75 with the exception that they recommended that the applicability and definition of jet routes reflect that aircraft may operate at 18,000 feet MSL, and that the floor of jet advisory areas be lowered to 18,000 feet MSL until this service is replaced by positive control. Its endorsement of the proposals is based in part on an interpretation of Agency Order AT 7430.7 that application of the 4.5° systems accuracy figure is intended to permit designation of airways and jet routes for distances greater than the normal spacing of navigational aids of 80 and 260 nautical miles, respectively. Its recommendations on the new airway structure are contingent upon the concept that if signal coverage is adequate between adjacent facilities, airways and jet routes will be designated direct provided no other factors are involved.

The proposed definition of jet routes states in part "Each jet route consists of a direct course for navigating aircraft between 18,000 feet MSL and flight level 450, inclusive." This clearly states that the jet route structure includes 18,000 feet MSL. The Agency in Notice No. 64-16; Docket No. 4973 (29 F.R. 4105) is considering alteration of Part 91 of the Federal Aviation Regulations to lower the base of the standard altimeter setting (QNE) to 18,000 feet MSL, which would, only under certain conditions, establish the lowest usable flight level of 180 (FL 180) at 18,000 feet MSL. It is believed that a statement to the effect that aircraft in the jet route structure may operate at 18,000 feet MSL would generate confusion at this time. Jet advisory areas are being phased out and replaced by positive control areas as the capability develops. The Agency does not deem it advisable to alter the concepts of an operation that is in the process of being discontinued. The extension of positive control to 18,000 feet MSL is the subject of Airspace Docket No. 64-WA-9 and will be disposed of in the processing of that docket. The 4.5° systems accuracy figure is employed to provide additional lateral protection for aircraft when operating along an airway or jet route and is applied after it has been determined that it is necessary to designate the airway or route via facilities that exceed the normal spacing, or where a flight check has determined that the changeover point is at a distance greater than one half the normal spacing. It is the policy of the Agency to designate airways and jet routes direct when no other determining factors are involved.

3. The National Business Aircraft Association concurs with the proposed airway widths, application of the systems accuracy figure and conversion to the nautical mile. It also concurs with revocation of the intermediate altitude airway structure and associated reporting points. It concurs with raising the ceiling of the low altitude airway structure but believes it should be raised to 24,000 feet MSL in lieu of 18,000 feet MSL, and that the floor of the jet route structure and area positive control remain at FL 240. It recommends that existing facilities that are frequency protected between 18,000 feet MSL and 24,000 feet MSL be retained by procedural action and charting symbology and that radar coverage be expanded to aircraft operating between 18,000 feet MSL and 24,000 feet MSL in lieu of imposing the restrictions of positive control.

An altitude of 18,000 feet MSL was established for the division between the route structures after a study of aircraft by type, capability and general altitude usage determined that this was a realistic ceiling for propeller driven and turboprop aircraft and also a realistic floor for short haul jet aircraft. A ceiling of 24,000 feet MSL could not be established for the airway structure because generally speaking the effective range of most navigational aids increases at higher altitudes, and with the number of such aids supporting the low altitude structure it is not feasible to prevent frequency interference up to this altitude. The comment directed toward positive control will be considered in Airspace Docket No. 64-WA-9 which is concerned with this subject.

4. The National Pilots Association endorsed the proposals.

5. The New Hampshire Aeronautics Commission agreed that the proposed two-layer structure was a step in the right direction, but objected to lowering of positive control.

6. The Soaring Society of America, Inc., requested additional time to evaluate the impact of the lowering of positive control on soaring operations.

7. Mr. Allen C. Miner objected to the two-layer structure and lowering of positive control because of its impact on VFR flying.

8. The State of North Dakota directed its comments toward Airspace Docket No. 63-WA-74 but directed its objections toward lowering of positive control.

9. Mr. Edward V. Minceski directed his comments toward Airspace Docket No. 63-WA-74 but directed his objections toward lowering of positive control.

10. George S. May International Company directed its comments toward Airspace Docket No. 63-WA-74 but directed its objections toward the lowering of positive control and its impact on soaring operations. It also questioned the lack of provisions for sailplane operations in the proposal. No provision is made in these parts for soaring because it is a procedural problem and is governed by Part 91 of the Federal Aviation Regulations.

11. Youngstown Airways, Inc., endorsed the proposal but objected to the lowering of positive control.

All comments on the proposal to lower the floor of positive control will be considered in Airspace Docket No. 84-WA-9 which is concerned with this subject.

In consideration of the foregoing, Parts 71 and 75 of the Federal Aviation Regulations are amended as hereinafter set forth, effective September 17, 1964.

These amendments are issued under the authority of sections 307(a) and 1110 of the Federal Aviation Act of 1958 (49 U.S.C. 1348(a) and 1510).

Issued in Washington, D.C., on June 30, 1964.

N. E. HALABY,
Administrator.

1. Subpart A of Part 71 is amended to read as follows:

Subpart A—General

- Sec. 71.1 Applicability.
71.3 Classification of Federal airways.
71.5 Extent of Federal airways.
71.7 Control areas.
71.9 Continental control area.
71.11 Control zones.
71.13 Transition areas.
71.15 Positive control areas.
71.17 Reporting points.
71.19 Bearings; radials; miles.

AUTHORITY: The provisions of this Subpart A issued under secs. 307(a) and 1110 of the Federal Aviation Act of 1958 (49 U.S.C. 1348(a) and 1510).

Subpart A—General

§ 71.1 Applicability.

(a) The airspace assignments described in Subparts B and C of this part are designated as Federal airways.

(b) The airspace assignments described in Subparts B through I of this part are designated as control areas, the continental control area, control zones, transition areas, positive control areas, and reporting points, as described in the appropriate subpart.

§ 71.3 Classification of Federal airways.

Federal airways are classified as follows:

- (a) Colored Federal airways—
- (1) Green Federal airways.
- (2) Amber Federal airways.
- (3) Red Federal airways.
- (4) Blue Federal airways.
- (b) VOR Federal airways.

§ 71.5 Extent of Federal airways.

(a) Each Federal airway is based on a centerline that extends from one navigational aid or intersection to another navigational aid (or through several navigational aids or intersections) specified for that airway.

(b) Unless otherwise specified in Subpart B or C of this part—

(1) Each Federal airway includes the airspace within parallel boundary lines 4 miles each side of the centerline. Where an airway changes direction, it includes that airspace enclosed by extending the boundary lines of the airway segments until they meet.

(2) Where the changeover point for an airway segment is more than 51 miles from either of the navigational aids defining that segment, and—

(i) The changeover point is midway between the navigational aids, the air-

way includes the airspace between lines diverging at angles of 4.5° from the centerline at each navigational aid and extending until they intersect opposite the changeover point; or

(ii) The changeover point is not midway between the navigational aids, the airway includes the airspace between lines diverging at angles of 4.5° from the centerline at the navigational aid more distant from the changeover point, and extending until they intersect with the bisector of the angle of the centerlines at the changeover point; and between lines connecting these points of intersection and the navigational aid nearer to the changeover point.

(3) Where an airway terminates at a point or intersection more than 51 miles from the closest associated navigational aid it includes the additional airspace within lines diverging at angles of 4.5° from the centerline extending from the associated navigational aid to a line perpendicular to the centerline at the termination point.

(4) Where an airway terminates, it includes the airspace within a circle centered at the specified navigational aid or intersection having a diameter equal to the airway width at that point. However, an airway does not extend beyond the domestic/oceanic control area boundary.

(c) Unless otherwise specified in Subpart B or C of this part—

(1) Each Federal airway includes that airspace extending upward from 700 feet (until designated from 1,200 feet or more) above the surface of the earth to, but not including, 18,000 feet MSL, except that Federal airways for Alaska and Hawaii have no upper limits; and

(2) The airspace of a Federal airway within the lateral limits of a transition area has a floor coincident with the floor of the transition area.

(d) One or more alternate airways may be designated between specified navigational aids or intersections along each VOR Federal airway described in Subpart C of this part. Unless otherwise specified, the centerline of an alternate VOR Federal airway and the centerline of the corresponding segment of the main VOR Federal airway are separated by 15°.

(e) A Federal airway does not include the airspace of a prohibited area.

§ 71.7 Control areas.

Control areas consist of the airspace designated in Subparts B, C, and E of this part, but do not include the continental control area. Unless otherwise designated, control areas include the airspace between a segment of a main VOR Federal airway and its associated alternate segments with the vertical extent of the area corresponding to the vertical extent of the related segment of the main airway.

§ 71.9 Continental control area.

The continental control area consists of the airspace of the 48 contiguous states and the District of Columbia at and above 14,500 feet MSL, but does not include—

(a) The airspace less than 1,500 feet above the surface of the earth; or

(b) Prohibited and restricted areas, other than restricted area military climb corridors and the restricted areas listed in Subpart D.

§ 71.11 Control zones.

The control zones listed in Subpart F of this part consist of controlled airspace extending upward from the surface of the earth. A control zone may include one or more airports and is normally a circular area with a radius of 5 miles and any extensions necessary to include instrument approach and departure paths.

§ 71.13 Transition areas.

The transition areas listed in Subpart G of this part consist of controlled airspace extending upward from 700 feet or more above the surface of the earth when designated in conjunction with an airport for which an approved instrument approach procedure has been prescribed; or from 1,200 feet or more above the surface of the earth when designated in conjunction with airway route structures or segments. Unless otherwise specified, transition areas terminate at the base of the overlying controlled airspace.

§ 71.15 Positive control areas.

The positive control areas listed in Subpart H of this part consist of controlled airspace within which there is positive control of aircraft.

§ 71.17 Reporting points.

(a) The reporting points listed in Subpart I of this part consist of geographic locations, in relation to which the position of an aircraft must be reported in accordance with § 91.125 of this chapter.

(b) Unless otherwise designated, each reporting point applies to all directions of flight. In any case where a geographic location is designated as a reporting point for less than all airways passing through that point, or for a particular direction of flight along an airway only, it is so indicated by including the airways or direction of flight in the designation of geographical location.

(c) Unless otherwise specified, place names appearing in the reporting point descriptions indicate VOR or VORTAC facilities identified by those names.

§ 71.19 Bearings; radials; miles.

(a) All bearings and radials in this part are true, and are applied from point of origin.

(b) Except as otherwise specified and except that mileages for Federal airways are stated as nautical miles, all mileages in this part are stated as statute miles.

2. Subpart B—Low Altitude Colored Federal Airways and Control Areas, of Part 71 is redesignated as Subpart B—Colored Federal Airways.

3. Section 71.101 of Part 71 is amended to read as follows:

§ 71.101 Designation.

The airspace assignments described in this subpart are designated as colored Federal airways.

§§ 71.103-71.109 [Amended]

4. The headings of §§ 71.103 through 71.109 are amended by striking out the words "Low altitude" therein.

5. Subpart C—Low altitude VOR Federal Airways and Control Areas, of Part 71 is redesignated as Subpart C—VOR Federal Airways.

6. Section 71.121 is amended to read as follows:

§ 71.121 Designation.

The airspace assignments described in this subpart are designated as VOR Federal Airways. Unless otherwise specified, place names appearing in the descriptions indicate VOR or VORTAC navigational facilities identified by those names.

§§ 71.123-71.127 [Amended]

7. The headings of §§ 71.123 through 71.127 are amended by striking out the words "Low altitude" therein.

8. Subpart D—Intermediate Altitude VOR Federal Airways, of Part 71 is revoked.

9. Subpart E—Continental Control Area, is redesignated as Subpart D—Continental Control Area.

10. Subpart F—Control Areas and Control Area Extensions, is redesignated as Subpart E—Control Areas and Control Area Extensions.

11. That part of § 71.161 of Part 71 preceding the listing of jet route segments is amended to read as follows:

§ 71.161 Designation of control areas associated with jet routes outside the continental control area.

Unless otherwise specified, the airspace centered on each of the following jet route segments has a vertical extent identical to that of a jet route and a lateral extent identical to that of a Federal airway and is designated as a control area. Unless otherwise specified, the place names appearing in the descriptions indicate VOR or VORTAC facilities identified by those names.

12. That part of § 71.163 preceding the listing of control areas is amended to read as follows:

§ 71.163 Designation of additional control areas.

Unless otherwise specified, each control area designated below has a lateral extent identical to that of a Federal airway and extends upward from 700 feet (until designated from 1,200 feet or more) above the surface of the earth, except that the airspace of a control area within the lateral limits of a transition area has a floor coincident with the floor of the transition area.

13. Subpart G—Control Zones, of Part 71 is redesignated as Subpart F—Control Zones.

¹ The airspace descriptions in this part are published in the *Federal Register*. Due to their complexity and length, they will not be included in this amendment of Part 71.

14. Subpart H—Transition Areas, of Part 71 is redesignated as Subpart G—Transition Areas.

15. Subpart I—Positive Control Route Segments and Positive Control Areas, of Part 71 is redesignated as Subpart H—Positive Control Areas.

§ 71.191 [Revoked]

16. Section 71.191 of Part 71 is revoked.

17. Subpart J—Reporting Points, of Part 71 is redesignated as Subpart I—Reporting Points.

§ 71.205 [Revoked]

18. Section 71.205 of Part 71 is revoked.

19. Those parts of §§ 71.203 through 71.215 of Part 71 preceding the listing of reporting points are amended to read as follows:

§ 71.203 Domestic low altitude reporting points.

The reporting points listed below are designated at all altitudes up to but not including 18,000 feet MSL.

§ 71.207 Domestic high altitude reporting points.

The reporting points listed below are designated at all altitudes from 18,000 feet MSL to Flight Level 450, inclusive.

§ 71.209 Other domestic reporting points.

The reporting points listed below are designated at all altitudes.

§ 71.211 Alaskan low altitude reporting points.

The reporting points listed below are designated at all altitudes up to and including 15,200 feet MSL.

§ 71.213 Alaskan high altitude reporting points.

The reporting points listed below are designated at all altitudes above 15,200 feet MSL.

§ 71.215 Hawaiian reporting points.

The reporting points listed below are designated at all altitudes.

20. Section 75.1 of Part 75 is amended to read as follows:

§ 75.1 Applicability.

The routes described in Subpart B of this part between high altitude navigational aids or intersections of their signals, are designated as jet routes along which aircraft may be operated between 18,000 feet MSL and flight level 450. The areas described in Subpart C of this part are designated as jet advisory areas along specified jet route segments, VOR/VORTAC radials, bearings from L/MF navigational facilities, direct courses between high altitude navigational facilities, centerlines of control areas, or in the vicinity of specific geographic locations.

21. Section 75.11 of Part 75 is amended to read as follows:

§ 75.11 Jet routes.

Each jet route designated in Subpart B of this part consists of a direct course for navigating aircraft between 18,000 feet MSL and flight level 450, inclusive, between the navigational aids and intersections specified for that route.

§ 75.13 [Revoked]

22. Section 75.13 of Part 75 is revoked.

23. Section 75.15 of Part 75 is amended to read as follows:

§ 75.15 Jet advisory areas.

(a) Jet advisory areas consist of airspace within the continental control area, as designated in Subpart C of this part.

(b) En route radar jet advisory areas consist of areas within which jet advisory service is provided with radar surveillance. Unless otherwise designated, each of them includes the area within 14 miles on each side of the jet route segment from flight level 240 through flight level 410, inclusive.

(c) Terminal radar jet advisory areas consist of areas in which jet advisory service is provided with radar surveillance. Unless otherwise designated, each of them includes the area within 14 miles on each side of the VOR/VORTAC radials, bearings from L/MF navigational facilities, direct courses between navigational facilities, or centerlines of control areas from flight level 240 through flight level 410, inclusive.

(d) Nonradar jet advisory areas consist of areas within which jet advisory service is provided on a procedural basis without radar surveillance. Unless otherwise designated, each of them includes the area within 14 miles on each side of the jet route segment from flight level 270 through flight level 310, inclusive, and from flight level 370 through flight level 410, inclusive.

(e) Jet advisory areas do not include the airspace within positive control areas, prohibited areas, or restricted areas except restricted area military climb corridors and those restricted areas specified in Subpart D of Part 71.

(f) En route jet advisory areas are based on jet routes and are identified by the associated jet route number. Terminal jet advisory areas are based on VOR/VORTAC radials, bearings from L/MF navigational facilities, direct courses between navigational facilities, or centerlines of control areas and those in the vicinity of geographical locations, and are identified by geographical names.

24. Section 75.17 is amended to read as follows:

§ 75.17 Bearings; radials; miles.

(a) All bearings and radials in this part are true and are applied from point of origin.

(b) Unless otherwise specified, all mileages in this part are stated as nautical miles.

[F.R. Doc. 64-6717; Filed, July 6, 1964; 4:40 a.m.]